

CLAIMS

We claim:

1. An isolated nucleic acid molecule encoding a polypeptide wherein the encoded polypeptide comprises amino acid residues 36 to 753 of SEQ ID NO:2.
2. The isolated nucleic acid molecule of claim 1 wherein the polypeptide comprises SEQ ID NO:2.
3. The isolated nucleic acid molecule of claim 1 wherein the polypeptide is SEQ ID NO:2.
4. The isolated nucleic acid molecule of claim 1 wherein the isolated nucleic acid molecule comprises nucleotides 191 to 2347 of SEQ ID NO:1.
5. The isolated nucleic acid molecule of claim 1 wherein the isolated nucleic acid molecule comprises nucleotides 86 to 2347 of SEQ ID NO:1.
6. The isolated nucleic acid molecule of claim 1 wherein the isolated nucleic acid molecule consists of nucleotides 191 to 2347 of SEQ ID NO:1.
7. An expression vector comprising the following operably linked elements:
 - a transcription promoter;
 - a DNA segment encoding a polypeptide wherein the encoded polypeptide comprises amino acid residues 36 to 753 of SEQ ID NO:2; and
 - a transcription terminator.
8. The expression vector of claim 7 wherein the DNA segment further encodes a secretory signal sequence operably linked to the polypeptide.
9. The expression vector of claim 8 wherein the secretory signal sequence comprises amino acid residues 1 to 35 of SEQ ID NO:2.
10. A recombinant host cell comprising the expression vector of claim 7.

11. A method of using the expression vector of claim 7 to produce a polypeptide that comprises amino acid residues 36 to 753 of SEQ ID NO:2, comprising culturing recombinant host cells that comprise the expression vector and that produce the polypeptide.

12. The method of claim 11 further comprising isolating the polypeptide from the cultured recombinant host cells.

13. An isolated polynucleotide encoding a fusion protein wherein the encoded fusion protein comprises a first portion and a second portion joined by a peptide bond, wherein the first portion comprises amino acid residues 36 to 753 of SEQ ID NO:2, and wherein the second portion comprises another polypeptide.

14. The isolated polynucleotide of claim 13 wherein the polynucleotide further encodes a secretory signal sequence consisting of amino acid residues 1 to 25 of SEQ ID NO:2, and wherein the secretory signal sequence is operably linked to the first portion and the second portion.